

CLAIMS

1. A method of packaging at least one component, comprising:
  - providing a lid having a plurality of vent holes;
  - molding sidewalls onto a substrate to form a plurality of cavities surrounding a component-mounting surface;
  - mounting a component on the component-mounting surface in each cavity;
  - applying a curable adhesive to a top surface of the sidewalls;
  - placing the lid upon the top surface of the sidewalls such that at least one vent hole is aligned with each cavity;
  - curing said adhesive, said vent hole providing a path for outgassing during curing;
  - sealing said vent holes to form a component package assembly having a plurality of cavities, separated by sidewalls; and
  - separating the component package assembly into a plurality of individual component packages.
2. The method of claim 1, wherein the component comprises electronic circuits.
3. The method of claim 1 wherein the component is a radio frequency circuit.
4. The method of claim 1, wherein the top cover and sidewalls are formed of polymers.
5. The method of claim 1, wherein curing said adhesive comprises heating the adhesive.
6. The method of claim 1, wherein separating comprises sawing, laser cutting, water cutting, milling, machining, lathing, and combinations thereof.
7. The method of claim 1 wherein placing the lid upon the sidewalls comprises applying a substantially uniform pressure over each cavity.

8. The method of claim 1 wherein the applying step comprises screen printing the adhesive on the top surface of the sidewalls.

9. The method of claim 1 wherein the cavity comprises a low dielectric constant material.

10. The method of claim 9 wherein the low dielectric constant material is air.

11. The method of claim 9 wherein the component is a radio frequency circuit.

12. Apparatus comprising:

a carrier comprising a substrate having a component mounting surface and a plurality of sidewalls molded to the substrate and arranged to define a plurality of cavities;

a lid comprising a plurality of vent holes, where each of the vent holes is aligned with a cavity, and the lid is attached to the carrier;

a component positioned in each cavity and bonded to the component mounting surface.

13. The apparatus of claim 12 wherein the cavities are filled with low dielectric constant material.

14. The apparatus of claim 13 wherein the low dielectric constant material is air.